

REMARKS

The Office Action rejects claims 1, 2, 4-7, 9, 12-14, 16-18 and 38-53 under 35 U.S.C. 103(a) as being anticipated by Wing (2,862,765) in view of Vella (4,862, 31). Applicant(s) have canceled all pending claims and added new claims 54-73 to better distinguish over Wing, taken singularly or in combination with Vella. The Office Action rejects claims 2, 14, and 48 under 35 U.S.C. 103(a) as being unpatentable over Wing in view of Vella as applied to claims 1, 12 and 47, and further in view of Valiant (4,175,703). Again, applicants have canceled claims 1, 12 and 47, providing new claims 54-73 to better distinguish over the Wing, Vella and Valiant references.

New claim 54 recites a chemical distribution system. A first tubing is manufactured from chemically-resistive material selected from the group consisting of polyethylene, polyurethane, nylon, and polypropylene. The first tubing has a pressure rating of at least 60 pounds-per-square-inch (PSI) and is pre-drilled with punch hole openings spaced at regular intervals one (1) to twenty (20) inches apart for dispensing a chemical solution, The first tubing is affixed along an exterior surface of a dwelling. A second solid tubing is connected to the first tubing. The second tubing is also manufactured from chemically-resistive material selected from the group consisting of polyethylene, polyurethane, nylon, and polypropylene. The second, solid tubing has a pressure rating of at least 60 pounds-per-square-inch (PSI), and includes a plurality of pre-defined insertion points. The walls of the second, solid tubing are made thinner at the pre-defined insertion points to aid in forming holes for a plurality of outlets inserted into the second, solid tubing for dispensing

the chemical solution. An installer selectively forms the holes in the pre-defined insertion points to suit a particular application. A quick-disconnect fitting has a first end coupled for receiving the chemical solution and a second end coupled to the first or second, solid tubing. The first end readily disengages a portable storage tank holding the chemical solution. A junction box is buried in the ground at an access location, wherein the quick-disconnect fitting is mounted within the junction box. A lever arm is coupled between the quick-disconnect fitting and the first or second, solid tubing. The lever arm and quick-disconnect fitting are laid lengthwise, below the ground, within the junction box when not in use, and pivot ninety (90) degrees to a vertical position, above the ground, to provide for ease of connection to receive the chemical solution from the portable storage tank.

Applicant(s) respectfully suggest that none of the prior art references of record teach or suggest, in singular or in combination, a tubing constructed of chemical resistant materials including one of the foregoing polymers, to provide for flexibility of installation and resistance to corrosion and weathering.

In addition, none of the prior art references of record teach a first tubing having a plurality of pre-drilled punch hole openings dispensed at the claimed interval. Further, the prior art does not teach a second, solid tubing which is configured with walls of varying thickness to allow for an installer to selectively designate where an outlet for a nozzle will be placed, in order to effectively provide chemicals to a specific location without delivering chemicals to undesired locations.

The prior art references do not teach a junction box adapted to be buried in the ground, where the quick-disconnect fitting is laid lengthwise within the junction box but pivots 90 degrees to a vertical position above the ground for ease of connection.

Claim 54 is believed to be patentably distinguish over the prior art of record. Claims 55-59 are believed to be in condition for allowance as they depend from what is believed to be an allowable dependent claim.

New claim 60 is drawn to a chemical distribution system. A tubing is configured in a closed system, and affixed along an exterior surface of a dwelling. Again, the tubing is manufactured from chemically-resistive material selected from the group consisting of polyethylene, polyurethane, nylon, and polypropylene, and has a plurality of outlets for dispensing a chemical solution. A quick-disconnect fitting has a first end coupled for receiving the chemical solution and a second end coupled to the tubing. The first end readily disengages a portable storage tank holding the chemical solution. A junction box buried in the ground in an access location. The quick-disconnect fitting is mounted within the junction box. A lever arm is coupled between the quick-disconnect fitting and the tubing. The lever arm and the quick-disconnect fitting are laid lengthwise, below the ground, within the junction box when not in use, and rotate ninety (90) degrees to vertically position the lever arm and quick-disconnect fitting above the ground, to provide for ease of connection of the quick-disconnect fitting to the portable storage tank to receive the chemical solution. A booster pump is coupled to the tubing to maintain tubing pressure.

Again, for reasons previously described, applicant(s) believe that new claim 60 patentably distinguishes over the prior art references. None of the prior art references teach or suggest the inclusion of a booster pump coupled to the tubing to maintain high pressure in the tubing lines. In contrast, applicant(s) teach the inclusion of an additional pressure regulator(s) or/and booster pump(s) to maintain tube pressures and evenly and accurately distribute the chemical solution to distal locations in the system.

Claim 60 is believed to patentably distinguish over the prior art references, and claims 61-65 are believed to be allowable dependent claims.

Finally, new claim 66 is also drawn to a chemical distribution system. A junction box is mounted below the ground. A lever arm has a quick-disconnect fitting connected to a first end. The lever arm and quick-disconnect fitting are mounted within the junction box. The lever arm is adapted to raise the quick-disconnect fitting from a first, substantially horizontal position within the junction box and below the ground, to a second, substantially vertical position exterior to the junction box and above the ground, for the quick-disconnect fitting to receive a chemical solution from a portable storage tank when in use. A tubing is connected to a second end of the lever arm and affixed along an exterior surface of a dwelling. The tubing is composed of chemically-resistant material from the group consisting of polyethylene, polyurethane, nylon, and polypropylene and including a plurality of outlets for dispensing the chemical solution. A booster pump is coupled to the tubing to maintain tubing pressure.


Again, claims 66, as well as dependent claims 67-73 are believed to patentably distinguish over the prior art references of record, for reasons previously described.

Applicant(s) believe that all information and requirements for the application have been provided to the USPTO. If there are matters that can be discussed by telephone to further the prosecution of the Application, Applicants invite the Examiner to call the undersigned attorney at the Examiner's convenience.

The Commissioner is hereby authorized to charge any fees due with this Response to U.S. PTO Account No. 17-0055.

Respectfully submitted,
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